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EXAMINER
FUREMAN, JARED

ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/705,361	LAWLOR, PAUL	
	Examiner	Art Unit	
	Jared J Fureman	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *32 and 34-69* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *32 and 41-67* is/are allowed.

6)☒ Claim(s) *34-40,68 and 69* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 November 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

Attachment(s)

1 ☒ Notice of References Cited (PTO-892)
2 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
4 ☐ Interview Summary (PTO-413) Paper No(s).
5 ☐ Notice of Informal Patent Application (PTO-152)
6 ☐ Other

DETAILED ACTION

Receipt is acknowledged of the amendment filed on 4/17/2003, which has been entered in the file. Claims 32 and 34-69 are pending.

Claim Objections

1. Claims 39, 41, 42, 59-61, and 67-69 are objected to because of the following informalities:

Claim 39, line 7: --said-- should be inserted before "coder".

Claim 41, lines 9, 10, 11, 14, and 15: --specific-- should be inserted before "function", in order to maintain consistency with "specific function" in line 8.

Claim 42, line 2 "data" should be replaced with --date--.

Claim 59, line 6: --specific-- should be inserted before "function", in order to maintain consistency with "specific function" in line 5.

Claim 60, line 2 "data" should be replaced with --date--.

Claim 61, line 2 "data" should be replaced with --date--.

Claim 67, lines 7 and 8: --specific-- should be inserted before "function", in order to maintain consistency with "specific function" in line 10.

Claim 68, line 4: --:-- should be inserted after "wherein".

Claim 69, lines 4, 5, 7, 8, and 9: --specific-- should be inserted before "function", in order to maintain consistency with "specific function" in line 2.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 35-40, 68, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Suzuki et al (EP 0 820 004 A1, cited by applicant).

The admitted prior art teaches a method of communicating between a first processing device (a processing system, such as one or more PC type computer systems, see page 3 lines 19-26 of the specification. The PC type computer system necessarily includes a computer-readable memory system having computer-readable data stored therein, and program instructions) configured to facilitate design of an image to be applied to packaged products and a second processing device (a processor/controller of the coding device, for example) configured to control a coder coding packaged products; wherein a field represents information concerning dates (a display until date or a use by date); wherein a field represents information concerning barcodes (unique information represented in the form of a barcode); wherein a field represents information concerning an incremental counter (an incrementing lot number); program instructions which are configured to assist with generation of a date, a

specification).

The admitted prior art fails to specifically teach a generic image data file transmitted from the first processing device to the second processing device defines an image in a generic non-coder-specific format defining a requirement for the image; and the second processing device being aware of processing capabilities of the coder and instructs the coder to apply images such that instructions sent to the coder depend upon the generic image data file and a definition of the processing capabilities; wherein the generic image data file requires a specific function to be performed and on receipt of the generic image data file, the second processing system refers to processing capabilities of the coder to perform the specific function, and when the coder is able to perform the specific function, the second processing system instructs the coder to generate the images such that the coder performs the specific function, and when the coder is incapable of performing the specific function, the second processing system performs the specific function before supplying lower level instructions to the coder; program instructions to be sent to the coder with reference to the generic image description and with reference to the processing capabilities of the coder; wherein the generic non-coder specific format defines a plurality of fields, wherein each of the fields specifies generic instructions for a specific portion of the code.

Suzuki et al teaches a method of communicating between a first processing device (an application program 5, which necessarily includes a computer-readable memory system having computer-readable data stored therein) configured to facilitate

(DDI)) configured to control a coder (page printer 3), wherein: a generic image data file (a bitmap data file) transmitted from the first processing device to the second processing device defines an image in a generic non-coder-specific format defining a requirement for the image; and the second processing device being aware of processing capabilities of the coder (via program instructions) and instructs the coder to apply images such that instructions sent to the coder depend upon the generic image data file and a definition of the processing capabilities (the DDI communicates with the page printer 3 in either a high-level language (a page description language (PDL)) or an intermediate code (an intermediate language (IML)), depending upon the capabilities of the page printer 3); wherein the generic image data file requires a specific function to be performed (the generic image data file must be converted into the intermediate language (IML)) and on receipt of the generic image data file, the second processing system refers to processing capabilities of the coder to perform the specific function, and when the coder is able to perform the specific function, the second processing system instructs the coder to generate the images such that the coder performs the specific function (the DDI communicates with the page printer 3 in the high-level language, and the page printer 3 converts the high-level language to the intermediate language), and when the coder is incapable of performing the specific function, the second processing system performs the specific function before supplying lower level instructions to the coder (the DDI converts the high-level language into the intermediate

of the fields specifies generic instructions for a specific portion of the code (the bitmap data file contains fields defining the image to be created using the bitmap data file) (see figure 1, column 1 lines 7-11 and column 1 line 54 - column 3 line 37, column 4 line 10 - column 5 line 11, column 5 lines 22-47, column 8 line 44 - column 9 line 7, column 12 lines 17-36).

In view of Suzuki et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the apparatus and method as taught by the admitted prior art, a generic image data file transmitted from the first processing device to the second processing device defines an image in a generic non-coder-specific format defining a requirement for the image; and the second processing device being aware of processing capabilities of the coder and instructs the coder to apply images such that instructions sent to the coder depend upon the generic image data file and a definition of the processing capabilities; wherein the generic image data file requires a specific function to be performed and on receipt of the generic image data file, the second processing system refers to processing capabilities of the coder to perform the specific function, and when the coder is able to perform the specific function, the second processing system instructs the coder to generate the images such that the coder performs the specific function, and when the coder is incapable of performing the specific function, the second processing system performs the specific function before supplying lower level instructions to the coder; program instructions to

format defines a plurality of fields, wherein each of the fields specifies generic instructions for a specific portion of the code, in order to improve the throughput of the whole system even without enhancing the throughput of a printer itself (see Suzuki et al, column 1 lines 7-11 and column 1 line 54 - column 2 line 6).

4. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art as modified by Suzuki et al as applied to claim 68 above, and further in view of Yeung (US 6,426,798 B1, previously cited).

The admitted prior art as modified by Suzuki et al fails to specifically teach the generic non-coder specific format being consistent with standards of the extensible mark-up language recommendations.

Yeung teaches the use of a generic non-coder (printer) specific format that is consistent with standards of the extensible mark-up language recommendations (see column 2 line 57 - column 3 line 23).

In view of Yeung's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the apparatus and method as taught by the admitted prior art as modified by Suzuki et al, the generic non-coder specific format being consistent with standards of the extensible mark-up language recommendations, in order to provide a universal printer data structure definition that can be used to create a universal printer description file for virtually any printer in virtually any operating system that supports the extensible mark-up language (see

Allowable Subject Matter

5. Claims 32 and 41-67 have been allowed over the prior art of record (claims 41, 42, 59-61, and 67 require correction of claim objections, discussed above).

6. The following is an examiner's statement of reasons for allowance: The prior art of record, taken alone or in combination, fails to teach or fairly suggest an apparatus, method, and computer readable instructions for applying graphical information onto packaged consumer products, comprising: a plurality of coders which apply graphical information to product packaging in response to received instructions, a processing system/computer which generates the instructions in response to received input data representing the graphical information, wherein a first of the coders is capable of performing a specific function and a second of the coders is incapable of performing the specific function, wherein the processing system refers to capabilities of coders to perform the specific function, and in dependence of the capabilities the processing system/computer (a) instructs the first coder to generate graphical information such that the first coder performs the specific function, and (b) performs the specific function before supplying lower level instructions to the second coder; in combination with the other claimed limitations as set forth in the claims.

While the admitted prior art teaches a plurality of coders having different capabilities, the admitted prior art teaches that since the coders have different

to the capabilities of the coders to perform a specific function, and in dependence of the capabilities the processing system (a) instructs a first coder to generate graphical information such that the first coder performs the specific function, and (b) performs the specific function before supplying lower level instructions to a second coder.

Suzuki et al teaches a processing system (a printer driver 9 or a "device driver interface" (DDI)) which refers to the capabilities of a coder (page printer 3) to determine the appropriate instructions or format of instructions to supply to the coder, however, Suzuki et al fails to specifically teach the processing system, in dependence of the coders capabilities to perform a specific function (a) instructing a first coder to generate graphical information such that the first coder performs the specific function, and (b) performs the specific function before supplying lower level instructions to a second coder. Thus, without the benefit of applicant's invention, there is no motivation for one of ordinary skill in the art at the time of the invention to combine the prior art of record in a manner so as to create the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

7. Applicant's arguments filed 4/17/2003 have been fully considered but they are

In response to applicant's argument that Suzuki et al's teachings are in contrast to the present invention (see page 17 of the amendment filed on 4/17/2003), as applicant's discuss on page 17, the claims require that the processing system or computer refers to the capabilities of coders to perform required functions and in cases where a coder can perform a required function, the function is performed by the coder and, in cases where a coder cannot perform a required function, the function is performed by the processing system. Suzuki et al teaches that the host considers the capabilities of a page printer 3 (a type of coder, in that the page printer encodes information by printing) when determining what format of communication to use between the host and the page printer. For example, if the page printer has high capabilities (capable of quickly converting the high-level language, for example), the host will communicate the with the page printer in a high-level language and then let the page printer convert the high-level language to an intermediate language. On the other hand, if the page printer has low capabilities (not capable of quickly converting the high-level language, for example), the host will convert the high-level language to the intermediate language and communicate with the printer using the intermediate language (see column 2 line 52 - column 3 line 6, for example). Thus, whether the extra burden is placed on the host or the page printer, the host does refer to the capabilities of the page printer. Therefore, Suzuki et al meets these claimed limitations.

In response to applicant's argument that there is no suggestion in Suzuki et al of

printers processing capabilities (see page 18 of the amendment filed on 4/17/2003), as discussed above, the application program 5 (as taught by Suzuki et al) has been interpreted as a first processing device and the application programming interface (API) module 8 and printer driver 9 (as taught by Suzuki et al) has been interpreted as a second processing device. The application program (first processing device) is used to create the image/data that is to be printed (see column 8 line 57 - column 9 line 7, for example). The image/data is created regardless of the processing capabilities of the page printer (coder), and thus, can be considered a generic definition. The application programming interface (API) module 8 and printer driver 9 (the second processing device) receives the image/data and then considers the processing capabilities of the specific page printer (coder) when deciding to communicate in the high-level language or the intermediate language (see column 4 lines 24-41, for example). Thus, the application programming interface (API) module 8 and printer driver 9 instructs the page printer (coder) in dependence of the generic definition and the processing capabilities of the page printer (coder). Furthermore, it is the combined teachings of the admitted prior art and Suzuki et al, which teaches applying the images to packaging.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yacoub (US 2003/0011805 A1), Aoki (US 2002/0041388 A1), and (JP 7-334318 A) all teach systems where a processor or host computer refers to

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (703) 305-0424. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jared J. Fureman
Art Unit 2876

July 24, 2003